IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF MICHIGAN

SIERRA CLUB, Plaintiff, v. CITY OF HOLLAND and HOLLAND BOARD OF PUBLIC WORKS, Defendants.	)	Case No. 1:08-cv-1183 Hon. Paul L. Maloney

BRIEF IN SUPPORT OF PLAINTIFF'S SECOND MOTION FOR PARTIAL SUMMARY JUDGMENT REGARDING PHYSICAL AND OPERATIONAL CHANGES AT THE DE YOUNG PLANT: SNOWMELT SYSTEM AND DILUTION PIPELINE INSTALLATION

I. INTRODUCTION.

This case is a "citizen suit" to enforce the Clean Air Act's New Source Review ("NSR")[1] provisions. Plaintiff Sierra Club asserts that Defendants City of Holland and Holland Board of Public Works ("HBPW") made "major modifications" at their James De Young Generating Station which triggered their obligation to comply with NSR. This motion seeks partial summary judgment finding that Defendants modified the De Young plant in violation of the Clean Air Act by making two physical changes that were also changes in the method of operation of the boiler units at the plant:

1. By altering Unit 3 to provide hot water to the so-called "snow melt" system, they modified the plant from an electric generation only plant into a combined electricity and hot water (for street and sidewalk heating) plant. ("The snowmelt system")

2. By installing a pipeline to dilute their hot water discharges into the lake, they modified the plant from one that limited coal combustion to reduce hot water

[1] "New Source Review" refers, generally, to the Prevention of Significant Deterioration program and the Nonattainment New Source Review program in Parts C and D of the Clean Air Act, respectively. 42 U.S.C. §§ 7470-7515.

discharges into one that relied upon a dilution system to reduce hot water discharges. ("The dilution pipeline system")

These modifications resulted in significant net emission increases, as defined by 40 C.F.R. § 52.21(b)(3)(i), for sulfur dioxide (SO_2), nitrogen oxides (NOx), particulate matter (PM), and particulate matter less than ten microns in diameter (PM10), Defendants were required to obtain a prevention of significant deterioration (PSD) permit before commencing construction for these modifications and were required to comply with best available control technology limits following each modification. Section 165(a) of the Act, 42 U.S.C. § 7475(a), 40 C.F.R. § 52.21, and Mich. Admin. Code §§ 336.2801 et seq. They did not seek a permit before commencing construction, have not obtained the required permits, and have not complied with best available control technology, in violation of the Clean Air Act. Plaintiff is entitled to a finding that, as a matter of law, the constructing the snowmelt system and the dilution pipeline system were "major modifications" under the Clean Air Act's PSD program. Moreover, because there is no material dispute of fact that would support Defendants' potential affirmative defense that the projects were "routine maintenance, replacement or repair," Plaintiff is entitled to a finding of liability for those two projects.

II. PLAINTIFF'S STATEMENT OF MATERIAL FACTS NOT IN DISPUTE.

1. Defendants are local government entities who own and are responsible for the operations of the James De Young Generating Station, which is located at 64 Pine Avenue, Holland, Ottawa County, Michigan. Answer to Amend. Compl., 3/18/10, Doc. 26 ¶¶ 10, 11, 19, 27.

2. The De Young plant consists of three boilers that are fired on coal and natural gas to produce electricity. Doc. 26 ¶ 20.

3. Boiler 3 was installed in 1953 and has a rated nameplate capacity of approximately 11.50 Megawatts (MW). Doc. 26 ¶ 21.

4. Boiler 4 was installed in 1961 and has a rated nameplate capacity of approximately 22 MW. Doc. 26 ¶ 22.

5. Boiler 5 was installed in 1968 and has a rated capacity of approximately 28.75 MW. Doc. 26 ¶ 23.

The Snowmelt System

6. In 1988, the HBPW installed piping and pumps to connect the condenser on JDY Unit 3 to a system of pumps and piping that melts snow under the streets and sidewalks in part of the City of Holland: known as the "snowmelt system". Howard Dep. Tr. at 86:25-87:4[2]; Radakovitz Dep. Tr. 125:23-127:16[3]; Koster Dep. Tr. 123:21-124:3[4]; Bender Dec. Ex. 4 (COH 34641-42)

7. The snowmelt system consists of a series of tube loops located underneath certain streets in the City of Holland that carry warm water from the James De Young Power Plant which warm the streets and allow snow to be melted from the streets. Radakovitz Dep. Tr. 125:21-126:7.

8. The snowmelt system project involved cutting the 36-inch pipe leading from the condenser to a tunnel leading from the plant, installing a 12-inch pipe and some valves, and installing some pumps to direct the water to the piping under the streets and sidewalks. Howard Dep. Tr. 87:9-88:13; Radakovitz Dep. Tr. 129:21-130:6.

[2] The Howard Deposition is Exhibit 2 to the Declaration of David Bender filed herewith.

[3] The Radakovitz Deposition is Exhibit 3 to the Declaration of David Bender filed herewith.

[4] The Koster Deposition is Exhibit 1 to the Declaration of David Bender filed herewith.

9. Approximately 1,500 gallons of heated water from the JDY Unit 3 is pumped per minute through 12-inch pipes that feed a series of 3-inch pipes that ultimately feed 1-inch plastic pipes that are arranged under the street surfaces and sidewalk brick pavers and parking lots in parts of the City. Bender Dec. Ex. 5 (COH 34564).

10. The project has been described as "unique" and a "first of its kind" project. Bender Dec. Ex. 6 (COH 34559), Ex. 7 (COH 34568).

11. JDY Unit 3 must be operating for the snowmelt system to effectively to melt snow and ice. Howard Dep. Tr. 91:8-10, 93:3-18.

12. When JDY Unit 3 is shut down, the condenser cools off and no longer heats water and the snowmelt system cannot heat the streets to melt snow. Radakovitz Dep. Tr. 127:17-128:8.

13. The JDY Unit 3 boiler has to be operating for the condenser to be hot enough to melt snow with the snowmelt system. Radakovitz Dep. Tr. 128:9-12; Koster Dep. Tr. 183:13-15.

14. During some conditions, the JDY Unit 3 can provide sufficient heated water to the snowmelt system to melt snow when Unit 3 is operating at its 4 megawatt minimum sustainable load. Koster Dep. Tr. 183:16-184:7.

15. During typical winter weather conditions, the JDY Unit 3 must operate at full load for the snowmelt system to work to melt snow. Howard Dep. Tr. 92:1-24.

16. The snowmelt system was designed for 93 degree water from the Unit 3 condenser. Koster Dep. Tr. 182:16-183:3.

17. When the water temperature leaving the Unit 3 condenser is lower than 93 degrees, the snowmelt system struggles to operate depending on atmospheric conditions. Koster Dep. Tr. 183:4-7.

18. JDY Unit 3 must operate at a minimum load for its condenser to discharge water of at least 93 degrees into the snowmelt system. Koster Dep. Tr. 183:8-10.

19. It is typical for JDY Unit 3 to operate at full load during the winter months because of the snow melt system. Howard Dep. Tr. 92:25-93:6.

20. When lower-cost electrical energy is available to HBPW than the power from JDY Unit 3, Unit 3 is taken off-line. Howard Dep. Tr. 94:19-22.

21. However, during the winter months, JDY Unit 3 is not taken off-line when there is lower cost available than that produced by Unit 3 because of the need to operate Unit 3 to operate the snowmelt system. Howard Dep. Tr. 94:24-95:5.

22. During the winter months, the HBPW does what it can to keep the JDY Unit 3 online so that the snowmelt system works. Howard Dep. Tr. 97:6-16.

23. Even when the JDY Unit 3 is not needed for electrical energy generation, the HBPW continues to run it so that it delivers heated water to the snowmelt system as needed. Koster Dep. Tr. 187:19-188:14.

Emission Increases From The Snowmelt System

24. During the 24-month period preceding the snowmelt system project, the annual average sulfur dioxide (SO2) emissions from James De Young Unit 3 were 473 tons per year. Fox Dec. ¶ 14.

25. The potential to emit for SO2 emissions from the James De Young Unit 3 is 1,243 tons per year. Fox Dec. ¶ 24.

26. The difference between the pre-project 24-month annual average emissions prior to the snowmelt system project and the Unit 3 potential to emit was 770 tons of SO2 per year at the time of the project. Fox Dec. ¶ 26.

27. During the 24-month period preceding the snowmelt system project, the annual average nitrogen oxides (NOx) emissions from James De Young Unit 3 were 431 tons per year. Fox Dec. ¶ 14.

28. The potential to emit for NOx emissions from the James De Young Unit 3 is 603 tons per year. Fox Dec. ¶ 24.

29. The difference between the pre-project 24-month annual average emissions prior to the snowmelt system project and the Unit 3 potential to emit was 171 tons of NOx per year at the time of the project. Fox Dec. ¶ 26.

30. During the 24-month period preceding the snowmelt system project, the annual average particulate matter (PM) emissions from James De Young Unit 3 were 9 tons per year. Fox Dec. ¶ 14.

31. The potential to emit for PM emissions from the James De Young Unit 3 is 266 tons per year. Fox Dec. ¶ 24.

32. The difference between the pre-project 24-month annual average emissions prior to the snowmelt system project and the Unit 3 potential to emit was 257 tons of PM per year at the time of the project. Fox Dec. ¶ 26.

33. During the 24-month period preceding the snowmelt system project, the annual average particulate matter less than ten microns in diameter (PM10) emissions from James De Young Unit 3 were 7 tons per year. Fox Dec. ¶ 14.

34. The potential to emit for PM10 emissions from the James De Young Unit 3 is 71 tons per year. Fox Dec. ¶ 24.

35. The difference between the pre-project 24-month annual average emissions prior to the snowmelt system project and the Unit 3 potential to emit was 64 tons of PM10 per year at the time of the project. Fox Dec. ¶ 26.

The Dilution Pipe

36. JDY Units 4 and 5 use lake water to condense steam in the condenser portion of those units. Howard Dep. Tr. 100:4-22.

37. Water is withdrawn from the lake, travels through the condensers on Units 4 and 5, where it is heated, and then is discharged back into the lake. Howard Dep. Tr. 100:4-23; Radakovitz Dep. Tr. 155:23-156:16.

38. There is a permit limit on the temperature of the water discharged back into the lake from the Units 4 and 5 condensers. Howard Dep. Tr. 100:24-101:3; Howard Dep. Ex. 16.

39. The temperature limit on the heated discharge was incorporated into the permits for the JDY plant in the mid-1990s. Howard Dep. Tr. 103:24-104:7.

40. Initially, the only way for HBPW to comply with the temperature limit was by reducing the load on the boilers, by burning less coal, and making less steam, when the discharge water was approaching the permitted temperature limit. Howard Dep. Tr. 103:6-19, 104:18-105:5, 106:8; Howard Dep. Ex. 16; Radakovitz Dep. Tr. 159:16-160:15, 161:8-162:4.

41. In 1996, HBPW installed a new pipeline at the JDY plant to dilute the heat or temperature of the condenser discharge from Units 4 and 5. Howard Dep. Tr. 101:4-102:9; Radakovitz Dep. Tr. at 155:23-157:12; Koster Dep. Tr. 178:2-9.

42. The pipeline was not original to the JDY plant. Howard Dep. Tr. 103:20-23.

43. The dilution line is a pipeline that connects the pipe leading to and the pipe leading from the JDY Units 4 and 5 condensers so that the condensers can be bypassed. Radakovitz Dep. Tr. at 156:11-21, 157:4-13.

44. There are also valves installed on the dilution pipeline that can be opened or closed. Radakovitz Dep. Tr. 157:13-158:11; Koster Dep. Tr. 179:14-17, 180:25-181:4.

45. The pipeline dilutes the heated water from the JDY Units 4 and 5 condensers by mixing it with un-heated lake water prior to discharge back into the lake. Howard Dep. Tr. 102:10-103:4.

46. The dilution pipeline is used primarily during the hottest time of the year when the lake temperature is at its warmest point. Koster Dep. Tr. 179:7-10.

Emission Increase From The Dilution Pipeline Project

47. During the 24-month period preceding the dilution pipe project, the annual average SO2 emissions from James De Young Units 4 and 5 were 892 and 1,211 tons per year, respectively. Fox Dec. ¶ 14.

48. The potential to emit for SO2 emissions from the James De Young Units 4 and 5 are 2,085 and 2,780 tons per year, respectively. Fox Dec. ¶ 24.

49. The difference between the pre-project 24-month annual average emissions prior to the dilution pipe project and the Units 4 and 5 potential to emit was 1,193 and 1,569 tons of SO2 per year, respectively, for a total of 2,762 tons per year, at the time of the project. Fox Dec. ¶ 26.

50. During the 24-month period preceding the dilution pipe project, the annual average nitrogen oxides (NOx) emissions from James De Young Units 4 and 5 were 740 and 995 tons per year, respectively. Fox Dec. ¶ 14.

51. The potential to emit for NOx emissions from the James De Young Unit 4 and 5 at the time of the dilution pipe project in 1996 were 1,227 and 1,421 tons per year, respectively. Fox Dec. ¶ 24.

52. The difference between the pre-project 24-month annual average emissions prior to the dilution pipe project and the Units 4 and 5 potential to emit was 487 and 426 tons of NOx per year, respectively, for a total of 913 tons, at the time of the project. Fox Dec. ¶ 26.

53. During the 24-month period preceding the dilution pipe project, the annual average particulate matter (PM) emissions from James De Young Units 4 and 5 were 15 and 19 tons per year, respectively. Fox Dec. ¶ 14.

54. The potential to emit for PM emissions from the James De Young Units 4 and 5 are 387 and 496 tons per year, respectively. Fox Dec. ¶ 24.

55. The difference between the pre-project 24-month annual average emissions prior to the dilution pipe project and the Units 4 and 5 potential to emit was 372 and 477 tons of PM per year, respectively, for a total of 849 tons, at the time of the project. Fox Dec. ¶ 26.

56. During the 24-month period preceding the dilution pipe project, the annual average particulate matter less than ten microns in diameter (PM10) emissions from James De Young Units 4 and 5 were 12 and 15 tons per year, respectively. Fox Dec. ¶ 14.

57. The potential to emit for PM10 emissions from the James De Young Units 4 and 5 are 125 and 163 tons per year, respectively. Fox Dec. ¶ 24.

58. The difference between the pre-project 24-month annual average emissions prior to the dilution pipe project and the Units 4 and 5 potential to emit was 113 and 148 tons of PM10 per year, respectively, for a total of 261 tons, at the time of the project. Fox Dec. ¶ 26.

III. STANDARD FOR SUMMARY JUDGMENT.

Summary judgment is appropriate if the evidence on record shows "that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." Fed. R. Civ. P. 56(c). Only *genuine* issues of *material* fact can prevent the grant of summary judgment. *Anderson v. Liberty Lobby*, 477 U.S. 242, 247-48, 106 S.Ct. 2505 (1986) (emphasis in original). "Genuine" issues are those upon which "a reasonable jury could return a verdict for the nonmoving party." *Id*. at 248. "Material" facts are identified by the substantive law of the case. *Id.* Therefore, "[o]nly disputes over facts that might affect the outcome of the suit under the governing law will properly preclude the entry of summary judgment." *Id*. (citations omitted). Once the moving party demonstrates a lack of genuine issues of material fact, the non-moving party must establish through evidence outside the pleadings that a genuine issue of fact exists for trial. *Celotex Corp. v. Catrett*, 477 U.S. 317, 324-25 (1986).

IV. BACKGROUND ON THE CLEAN AIR ACT AND NEW SOURCE REVIEW PROGRAM.

The Clean Air Act ("CAA") is designed to protect and enhance the quality of the nation's air. 42 U.S.C. § 7401(b). Congress enacted the CAA Amendments of 1970 "to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population." 42 U.S.C. § 7401(b)(1). The Prevention of Significant Deterioration ("PSD") program requires new or modified major sources of air pollution[5] to, among other things: (1) obtain a permit; (2) demonstrate that its emissions will not "cause" or "contribute to" an exceedance of ambient air standards or any applicable PSD "increment"; and (3) meet a stringent "best available pollution control technology" (BACT),

[5] The PSD program requires permitting and analysis of air quality impacts prior to construction or modification of "major emitting facilities," such as the De Young plant, "that emit, or have the potential to emit" 100 "tons per year" of a pollutant. 42 U.S.C. §§ 7475(a), 7479(1).

developed "case-by-case" based on the maximum degree of reduction achievable. 42 U.S.C. §§ 7473, 7475(a)(3) and (4), (d), (e), 7479(3). Certain polluters, like the De Young plant, that existed prior to the 1977 Clean Air Act Amendments were temporarily "grandfathered" under the assumption that they would be retired at the end of their useful lives and replaced by new facilities that would be required to comply with the PSD program, or would be subject to the PSD program as soon as they were "modified." *Alabama Power v. Costle*, 636 F.2d 323, 400 (D.C. Cir. 1979); *see also Wis. Elec. Power Co. v. Reilly*, 893 F.2d 901, 909 (7th Cir. 1990) ("*WEPCO*") ("But Congress did not permanently exempt existing plants from these [PSD] requirements; section 7411(a)(2) provides that existing plants that have been modified are subject to the Clean Air Act programs at issue here."). Thus, the CAA's PSD program is triggered at existing plants, like De Young, any time that a "major modification" occurs. 42 U.S.C. §§ 7475(a); 40 C.F.R. § 52.21(j), (r).

A "major modification" is defined as "any physical change or change in the method of operation of" a major stationary source that would "result in a significant net emissions increase of any pollutant subject to regulation" under the CAA. *See* 40 C.F.R. § 52.21(b)(2)(i) (1980-2002).[6] Whether a project results in a significant "net emissions increase" is determined by calculating the "increase in actual emissions" based on the different definitions of "actual emissions" for pre-project and post-project periods. 40 C.F.R. § 52.21(b)(3)(i), (21) (1993).

[6] The definition of "major modification" excludes changes that are "Routine maintenance, repair and replacement." 40 C.F.R. § 52.21(b)(2)(iii)(a). Defendants have claimed that some or all of the projects at issue in this case are Routine Maintenance Repair and Replacement. This issue is distinct from the issues in this motion and is not at issue here. Whether the projects were "Routine maintenance, repair and replacement" will be determined through separate motions or at trial.

Once the increase is calculated, it is compared to the thresholds in 40 C.F.R. § 52.21(b)(23) to determine if the increase is "significant."[7]

V. ARGUMENT.

A. The Snowmelt System and Dilution Pipes Are Undeniably "Physical Changes."

As noted above, the PSD program requirements are triggered by a "modification," which can consist of either a physical change or a change in method of operation. 42 U.S.C. § 7411(a)(4). Courts have broadly interpreted the meaning of "any physical change or change in the method of operation." In *Alabama Power*, the D.C. Circuit remanded an EPA regulation that would have exempted changes below a certain size from PSD coverage, holding that the term "'modification' is nowhere limited to physical changes exceeding a certain magnitude" and that EPA's authority to exempt projects from coverage was very limited. 636 F.2d at 400. In the *WEPCO* decision in 1990, the Seventh Circuit similarly held that "the potential reach of these modification provisions is apparent: the most trivial activities-- the replacement of leaky pipes, for example—may trigger the modification provision." 893 F.2d at 905. The Seventh Circuit reiterated that "courts considering the modification provisions of… PSD have assumed that 'any physical change' means precisely that." *Id*. at 910. More recently, the D.C. Circuit in 2006 noted that "Congress's use of the word 'any' indicates the intent to cover all of the ordinary meanings of the phrase" in the definition of modification. *New York v. EPA*, 443 F.3d 880, 889 (D.C.Cir. 2006). Therefore, the D.C. Circuit concluded, "Congress's use of the word 'any' in defining a 'modification' means that all types of 'physical changes' are covered." *Id*. at 890.

[7] A "significant" net emissions increase means an increase in the rate of emissions that would equal or exceed any of the following rates for the following pollutants: 40 tons per year of NOx; 40 tons per year of SO_2; 7 tons per year of sulfuric acid mist, 25 tons per year of PM, and 15 tons per year of PM10. 40 C.F.R. § 52.21(b)(23)(i). For pollutants subject to regulation under the Act that are not set forth in 40 C.F.R. § 52.21(b)(23)(i), any increase is significant. 40 C.F.R. § 52.21(b)(23)(ii).

EPA has similarly defined the phrase "any physical change" to mean "virtually all changes, even trivial ones… ." 68 Fed. Reg. at 61,727.

Given the extremely broad definition of "physical change," there is no question that the installation of piping and pumps at the James De Young plant, cutting into the cooling water piping and splicing a new 12-inch pipeline into it to create the snowmelt system is a "physical change." *See* Plaintiff's Proposed Finding of Fact (PPFOF) ¶¶ 7-8 . Similarly, installing a new pipeline at the JDY plant to bypass the Unit 4 and 5 condensers (the dilution pipeline) is undeniably a physical change to the plant. *See* PPFOF ¶¶ 41-44.

B. The Snow Melt And Dilution Pipeline Systems Also Resulted in Changes in The Method of Operating the De Young Plant.

As noted above, a "major modification" can consist of "any… change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act." 40 C.F.R. § 52.21(b)(2)(i); *see also* 42 U.S.C. § 7411(a)(4). The statue and regulations do not further define what constitutes a "change in the method of operation." However, like for physical changes, Congress include the word "any" to preface which changes in method of operation are modifications. *Id.* Therefore, all types and degrees of change in operation are covered. *New York*, 443 F.3d at 889, 890.

Moreover, the regulations exclude very specific type of change in method of operation from the definition. *See* 40 C.F.R. § 52.21(b)(2)(iii) (excluding specific types of activities from the definition of "modification"). For example, the regulation excludes the use of an alternative fuel in specific limited circumstances, *id.* § 52.21(b)(2)(iii)(b)-(e), an increase in hours of operation or production rate unless prohibited by a permit, *id.* § 52.21(b)(2)(f), a change in plant ownership, § 52.21(b)(2)(g), or the reactivation of a "very clean coal-fired electric utility steam generating unit." *Id.* § 52.21(b)(2)(k). Because EPA and Congress used the inclusive, broad

word "any" to preface which physical and operational changes trigger PSD requirements, and explicitly excluded particular operational changes from the definition, all operational changes that are not explicitly excluded by the definition are necessarily included and trigger PSD requirements. Norman Singer, *Statutes and Statutory Construction* § 47:11 (7th Ed. 2007) ("An enumeration of an exceptions from the operation of a statute indicates that the statute should apply to all cases not specifically enumerated."); *see also e.g., National-Southwire Aluminum Co. v. U.S. E.P.A*, 838 F.2d 835, 837-39 (6th Cir. 1988) (applying the definition of modification[8] to the disabling of scrubbers and finding it to be a change in method of operation); *U.S. v. Chevron U.S.A.*, 639 F. Supp. 770, 778-79 (W.D. Tex., 1985) (finding that by ceasing its practice of removing hydrogen sulfide from fuel, a refinery "clearly changed the method of operation").

In light of the broad definition of "any" change in operations, and the fact that neither is within the expressly-excluded categories, the 1988 implementation of the snowmelt system and the 1996 implementation of the dilution pipeline system are changes in operations constituting modifications. Following the snowmelt system's installation, the JDY Unit 3 is operated as both an electrical generating unit and as a means to provide hot water to the underground snowmelt system. PPFOF ¶¶ 2-3, 6. The unit must operate for the snowmelt system to work and, during most winter conditions, must operate at full load. PPFOF ¶¶ 11, 15. Indeed, Unit 3 is now dispatched even when not economical to generate electricity so that it continues to provide hot water to the snowmelt system. PPFOF ¶¶ 20-21. This change—from an electric-generating-only unit that is dispatched to meet electrical energy needs, to a combined electric and hot water generating unit that is dispatched to meet hot water snow-melting needs during the winter, is a change in the unit's operations.

[8] The case specifically addressed the New Source Performance Standards in 42 U.S.C. § 7411, which is the same definition used for the PSD program because the PSD program adopts § 7411 by reference. *See* 42 U.S.C. § 7479(2)(C).

Similarly, prior to installing the dilution pipeline in 1996, the JDY Units 4 and 5 would be operated to meet the water discharge temperature limit by backing off the unit (burning less coal) during the hottest periods of the year. PPFOF ¶¶ 40-41. Following the dilution pipeline, however, the plant operators can control the valves on the dilution pipeline to use cooler water to dilute the heated water and comply with the permit limits. PPFOF ¶¶ 43-45. This change, from reducing operations and coal burning to meet the limit, to using dilution to meet the permit limit, is a change in the unit's operations.

C. The changes are not excluded routine maintenance repair and replacement.

Because the definition of "modification," as noted above, applies the PSD program to the most minute physical and operational changes, EPA adopted an exemption by regulation based on the *de minimus* legal doctrine, whereby physical or operational changes that constitute "routine maintenance, repair, and replacement" are exempt from the definition of modification. 40 C.F.R. §§ 51.165(a)(1)(v)(C), 51.166(b)(2)(iii), 52.21(b)(2)(iii)(a); *see also* 67 Fed. Reg. 80,290, 80,292 (Dec. 31, 2002); 57 Fed. Reg. 32313, 32316-19 (July 21, 1992) (explaining the need for the routine maintenance exemption to avoid PSD "encompass[ing] the most mundane activities at an industrial facility (even the repair or replacement of a single leaky pipe, or a change in the way the pipe is utilized."); *WEPCO*, 893 F.2d at 905. As the D.C. Circuit has held, the routine maintenance, repair and replacement exemption is only lawful (if at all), based on a *de minimis* theory of administrative necessity. *Alabama Power*, 636 F.2d at 360-61, 400; *New York*, 443 F.3d at 883-84 (holding that the only possible basis for a RMRR is a *de minimis* theory). Because the routine maintenance exemption conflicts with the literal language used by Congress applying PSD to "any" change, the routine maintenance exemption must be limited to the very mundane daily activities that would overwhelm permitting agencies if subjected to

permitting. *Cf. WEPCO*, 893 F.2d at 909 (warning that the routine maintenance provision cannot be interpreted to "open vistas of indefinite immunity from the provisions of … PSD"); *U.S. v. Ohio Edison Co.*, 276 F. Supp. 2d 829, 855 (S.D.Ohio 2003); *In re Tenn. Valley Auth.*, 9 E.A.D. 357, 410-11 (EAB 2000) (rejecting an interpretation of routine maintenance that would "constitute 'perpetual immunity' for existing plants, a result flatly rejected by Congress and the circuit courts in *Alabama Power* and *WEPCO*"). In fact, the D.C. Circuit has indicated that, even when applied very narrowly, the routine maintenance provisions may not be lawful because it exempts from coverage changes that are within Congress's broad statutory language. *See New York*, 443 F.3d at 888 (noting that the routine maintenance exemption may be unlawful "given the limits on the scope of the de minimum doctrine")(citing *Shays v. FEC*, 414 F.3d 76, 113-14).[9]

EPA's long-standing interpretation of the definition of PSD-triggering "physical changes," and the routine maintenance exemption, "is to construe "physical change" very broadly, to cover virtually any significant alteration to an existing plant and to interpret the exclusion related to routine maintenance, repair and replacement narrowly." 68 Fed. Reg. at 61,727; *see also In re Tenn. Valley Auth.*, 9 E.A.D. at 392-93 (citing *O'Neil v. Barrow County Bd. of Comm'rs*, 980 F.2d 674 (11th Cir. 1993); *North Haven Bd. of Educ. v. Bell*, 456 U.S. 512 (1982)); Letter from Doug Cole, EPA, to Alan Newman, Washington Dept. of Ecology

[9] In *Shays*, the D.C. Circuit held that "there are limits" to agencies' ability to create *de minimis* exceptions to statutory schemes, including: (1) that the "*de minimis* exemption power does not extend to 'extraordinarily rigid' statutes"; and (2) that it "does not extend to 'a situation where the regulatory function does provide benefits, in the sense of furthering regulatory objectives, but the agency concludes that the acknowledged benefits are exceeded by the costs'." 414 F.3d at 114. While this issue was not before the D.C. Circuit in the *New York* case, the court's holding implies that the Clean Air Act is "rigid" and that including all changes and emission increases furthers the CAA's regulatory objectives. 443 F.3d at 885-89 (holding that the PSD program applies to "any" physical changes, with no limitation except those changes that do not increase emissions, due to "Congress's basic goals… to intensify the war against air pollution").

(November 5, 2001)[10]. The Seventh Circuit has summarized and approved EPA's four-part test to assess whether a project falls within the narrow routine maintenance exemption: (1) the nature and extent of a change; (2) the purpose for the change; (3) the frequency of the change; and (4) the cost of the change. *WEPCO*, 893 F.2d at 909-11; *see also* 67 Fed. Reg. 80,290, 80,292-93 (Dec. 31, 2002) (describing the routine maintenance exemption as "a case-by-case determination by weighing the nature, extent, purpose, frequency, and cost of the work as well as other factors to arrive at a common sense finding."). District Courts have generally applied this four-factor *WEPCO* test. *United States v. Cinergy Corp.*, 495 F. Supp. 2d 909, 933-948 (S.D.Ind. 2007), *rev'd on other grounds at* 623 F.3d 455 (7th Cir. 2010); *United States v. Southern Indiana Gas & Electric Co.*, 245 F. Supp. 2d 994, 1008 (S.D.Ind. 2003) (*SIGECO*); *United States v. Southern Indiana Gas & Electric Co.*, 2003 WL 446280, *2 (S.D.Ind. Feb. 18, 2003); *United States v. Southern Indiana Gas & Electric Co.*, 258 F. Supp. 2d 884, 886 (S.D.Ind. 2003); *see also Ohio Edison*, 276 F. Supp. 2d at 834. In doing so, courts have recognized that routine maintenance is an extremely narrow exemption that is only legally justifiable when applied extremely narrowly. *SIEGCO*, 245 F. Supp. 2d at 1019 (quoting a USEPA determination for Wisconsin Electric's Port Washington plant that the exemptions from the definition of "modification"—including routine maintenance—are "very narrow."). Courts have thus identified three hallmarks of the RMRR exemption:

> First, the exemption applies to a *narrow range of activities*, in keeping with the EPA's limited authority to exempt activities from the [CAA]. Second, the exemption applies only to activities that are *routine for a generating unit*. The exemption does not turn on whether the activity is prevalent within the industry as a whole. Third, *no activity is categorically exempt*. EPA examines each activity on a case-by-case basis, looking at the nature and extent, purpose, frequency, and cost of the activity.

[10] Available at http://www.epa.gov/region7/programs/artd/air/nsr/nsrmemos/20011105.pdf

SIGECO, 245 F.Supp. 2d at 1008 (emphasis added, original emphasis omitted).

Here, there is no evidence to support an affirmative defense by Defendants that the snowmelt and dilution pipe projects qualify as routine maintenance repair and replacement. *See U.S. v. First City Nat'l Bank of Houston*, 386 U.S. 361, 366 (1967) (explaining the "general rule where one claims the benefit of an exception to the prohibition of a statute" carries the burden of proof with respect to that exception); *Sierra Club v. Morgan*, 2007 U.S. Dist. LEXIS 82760, *35 (W.D. Wis. Nov. 7, 2007) ("Because defendants are claiming the benefit of the ["routine maintenance"] exemption the burden falls on the defendants' to show that the projects are exempt from [the Clean Air Act] compliance."); *U.S. v. E. Ky. Power Coop, Inc*., 498 F. Supp. 2d 976, 995 (E.K. Ky. 2007) ("[t]he burden shifts to [defendant] to prove that its activities are exempt from the definition of 'modification' because they were routine."); *Ohio Edison Co.*, 276 F. Supp. 2d at 856 (same); *Isle Royale Boaters Ass'n v. Norton*, 154 F.Supp.2d 1098, 1111 (W.D.Mich. 2001) ("a moving party who does not have the burden of proof at trial may properly support a motion for summary judgment by showing the court that there is no evidence to support the non-moving party's case… the party opposing the motion must then demonstrate with 'concrete evidence' that there is a genuine issue of material fact for trial."). To support its "routine maintenance" defense (if they even attempt to assert it), the Defendants would have to show that each of the four factors weigh in favor of routine maintenance. *See e.g., Cinergy Corp.*, 495 F.Supp.2d at 936 n.14 (holding that even if the defendant had shown that a project was frequently done, the court would still find the project non-routine because "consideration of all of the other factors together would still clearly demonstrate that none of the projects were routine."). More importantly, the addition of new equipment in the plant—the piping and pumps for the snowmelt and the pipes and valves for the dilution pipe—are simply not within the plain

meaning of "maintenance," "repair" or "replacement." Nor is the change in operations resulting from the new equipment within the plain meaning of any of those words.

C. The Snow Melt and Dilution Pipeline Projects Resulted in Significant Net Emission Increases.

1) Emission Increases From The Snowmelt and Dilution Pipeline Projects Are Calculated By The Default Actual-to-Potential Test.

The second factor used in determining whether a project occurring at a major source of air pollution is a "major modification" is whether the project results in a significant increase in pollutant emissions. There are two possible methods for calculating emission increases attributable to modifications under the NSR program: (1) actual-to-potential test; and (2) actual-to-projected-actual test. As set forth in Plaintiff's First Motion for Partial Summary Judgment, the actual-to-potential test applies to all projects at the James De Young plant. *See* Br. Supp. Pls. First Mot. Part. Sum. J., Doc. 43; Reply Br. Supp. Pls. First Mot. Part. Sum. J, Doc. 60. As set forth in those filings, the JDY units 3 and 4 are too small to qualify for another test and HBPW never satisfied the reporting obligations for the only alternative test. Therefore, that test necessarily applies to the snowmelt and dilution pipe projects. Moreover, even if the Defendant's interpretation of law were applied—and the actual-to-potential test only applied when changes were not "like kind replacements," Defs. Opp. To Pls. First Mot. Part. Sum. J., Doc. 58 at 11—the actual-to-potential test would apply to the snowmelt and dilution pipeline projects because they are not "like kind" replacements under any reasonable definition of that phrase. Both projects added new equipment, rather than replacing existing equipment in the

plant. *See e.g.*, Def. Br. at 11 (defining "like-kind replacements" as "replac[ing] old parts with similar new ones").[11]

2) The Snowmelt System Resulted In Significant Increases In SO2, NOx, PM and PM10.

Pursuant to the actual-to-potential test, comparing the pre-projected annual average emissions during the pre-project baseline period and the post-project potential to emit, the snowmelt system project resulted in the following net emission increases from Unit 3:

- **NOx** 171 tons per year
- **SO_2** 770 tons per year
- **PM** 257 tons per year
- **PM_{10}** 64 tons per year

PPFOF ¶¶ 24-35. Each of these increases exceeded the threshold for a "significant increase" resulting in a "major modification" for those pollutants. The thresholds are 40 tons for SO_2 and NOx, 25 tons for PM and 15 tons for PM_{10}. 40 C.F.R. § 52.21(b)(23)(i). Therefore the snowmelt system project was a major modification. 40 C.F.R. § 52.21(b)(2)(i) ("Major modification means any physical or change in the method of operation… that would result in: a significant emissions increase…")

[11] As noted in Plaintiff's prior filings, Docs. 43, 60, the "begun normal operations" and "like-kind" replacement criteria are not the applicable criteria for selecting the emission increase test. Regardless, even if they were, they would lead to the same result here: the application of the actual-to-potential test.

3) The Dilution Pipe Project Resulted In Significant Emission Increases in SO_2, NOx, PM and PM10.

Pursuant to the actual-to-potential test, comparing the pre-projected annual average emissions during the pre-project baseline period and the post-project potential to emit, the dilution pipe project resulted in the following net emission increases from Units 4 and 5:

- **NOx** 913 tons per year
- **SO_2** 2762 tons per year
- **PM** 849 tons per year
- **PM_{10}** 261 tons per year

PPFOF ¶¶ 47-58. Each of these increases exceeded the threshold for a "significant increase" resulting in a "major modification" for those pollutants. The thresholds are 40 tons for SO_2 and NOx, 25 tons for PM and 15 tons for PM_{10}. 40 C.F.R. § 52.21(b)(23)(i). Therefore the dilution pipe project was a major modification. 40 C.F.R. § 52.21(b)(2)(i) ("Major modification means any physical or change in the method of operation… that would result in: a significant emissions increase…")

VI. CONCLUSION.

For the foregoing reasons, Sierra Club respectfully requests that the Court enter partial summary judgment for Sierra Club finding that: (1) the snowmelt system and dilution pipeline system were physical changes and therefore modifications to the James De Young plant; (2) the resulting operational changes at the James De Young plant following the snowmelt and dilution pipe projects were modifications; (3) the snowmelt and dilution pipeline projects were major modifications for SO_2, NOx, PM and PM10; (4) Defendants have not met their burden to prove that the snowmelt and dilution pipeline projects were "routine maintenance"; and (5) Plaintiff is entitled to a finding of liability for the snowmelt system and dilution pipeline system projects.

Dated: November 26, 2010

MCGILLIVRAY WESTERBERG & BENDER LLC

/s/ David C. Bender

David C. Bender
Christa O. Westerberg
305 S. Paterson Street
Madison, WI 53703
Tel. 608.310.3560
Fax 608.310.3561
bender@mwbattorneys.com
westerberg@mwbattorneys.com

CULLEN WESTON PINES & BACH LLP
Lester A. Pines
122 West Washington Avenue, Suite 900
Madison, WI 53703
Telephone: (608) 251-0101
Facsimile: (608) 251-2883
pines@cwpb.com